



STUDY OF THE ECONOMICS AND BENEFIT COST RATIO OF BRINJAL AT DIFFERENT FARM LEVELS

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Abstract

The main objective of the present study was to analysis the economics and benefit cost ratio of Brinjal in two villages of Ghazipur district of Uttar Pradesh, India. It was found that the farmers of all selected randomly groups has been taken the crop on their field through a good advance package of practices, therefore their yield and net return in all size groups increased respectively in time. The study concludes yield and net return should be increased in future if they go through a good farm plans along with better crop management systems.

Key Words: Village, Farmers, Yield, Income, Farm plans.

Introduction

Brinjal (*Solanum melongena* L.) is warm season crop its plant not with stand frost the main sowing season being during July-August for a good yield 20-25 tons of FYM per hectare incorporated into the soil at the time of field preparation. It is necessary to maintain an even moisture supply in the soil; over watering is as harmful as insufficient irrigation. In this crop, phomopsis wilt is the most important fungal disease and is seed borne. Hot water treatment of the Seed helps to reduce the incidence of the disease. Little leaf is caused by mycoplasma and can be partially controlled with antibiotics. Brinjal is prone to attack by many damages caused by insects, pests, fungus, bacteria and viruses Purohit ML and Khatri AK (1973). Brinjal productions area consistently and extensively damaged by brinjal fruit and shoot borer and other fruit borer insects reported by Kuppu Swamy and Balasubramanian (1980). To reduce pest linked damage in brinjal as well as to protect the environment from adverse effect of pesticides, as an insect resistance management strategy Ghosh *et al.*, (2003). In India brinjal is the major source of profitable income for farmers because of local demand and it is a perennial crop so that fruit can be harvested throughout the year. A large number

of brinjal varieties and hybrids are grown by small, medium, large size of farmers throughout the year.

Materials and Methods

The present study was conducted in two randomly selected villages namely Jaitpur (Block-Sador) and secondly Gaura (Block-Sadat) in Ghazipur district of Uttar Pradesh, India with farmers Scientist Collaborations in demonstrated groups small, medium and large size while selected randomly seven farmers from each groups Narendra hybrid Baigan-1 has been suggested seed rate 500-600 gram per hectare during field preparations 25 tons of FYM allowed to the soil planting distance line to line 60-75 cm and plant to plant are 45-60 cm. was proposed. Crop was taken on the field during July-August Season N:P:K:@ 100:50:25 Kg/hectare for better quality and better yield advised. All the advance package of practices has been specify for timely whenever needed. Survey method has been used to collect the data and tabular analysis was being used. Family schedule has been used to collect the data from the selected farmers according to their size of holdings, family size, area of the production and income of the crop etc. The economics has been calculated at their current price rates.

Table 1: Cost of production and benefit cost ratio of brinjal under different farm sizes of groups in village Jaitpura.

Size of Farms	No. of Farms	FYM (Tonnes /hect)	N:P:K (Kg. /ha.)	Yield (Qt.ha)	Cost of Production (Rs./hect.)	Gross Income (Rs./hect.)	Net Income (Rs./hect.)	Benefit Cost Ratio
Small	7	25	100:50:25	290	26,450	68,980	42,530	2.60
Medium	7	25	100:50:25	315	28,900	77,365	48,465	2.66
Large	7	25	100:50:25	340	30,680	83,445	52,765	2.72

Table 2: Cost of production and benefit cost ratio of brinjal under different farm sizes of groups in village Gaura.

Size of Farms	No. of Farms	FYM (Tonnes /hect)	N:P:K (Kg. /ha.)	Yield (Qt.ha)	Cost of Production (Rs./hect.)	Gross Income (Rs./hect.)	Net Income (Rs./hect.)	Benefit Cost Ratio
Small	7	25	100:50:25	310	27,190	72,500	45,310	2.67
Medium	7	25	100:50:25	320	29,360	78,750	49,390	2.68
Large	7	25	100:50:25	335	32,740	84,900	52,160	2.59

Results and Discussion

Table 1 shows that the farmers Jaitpura village got the yield of brinjal Qt. per hectare was 290, 315, 340; cost of production Rs./ha was 26450, 28900 and 30680; net income was formed Rs./hect 42530, 48465 and 52765 alongwith Benefit cost ratio was 2.60, 2.66 and 2.72 in small, medium and large size groups reveals increasing trends. While in other village Gaura table 2 shows that yield of brinjal Qt/hect was 310, 320, 335; cost of production Rs./hect was 27190, 29360 and 32740; net income was Rs./hect 45310, 49390 and 52160 exhibits increasing trends, while benefit cost ratio was 2.67, 2.68 and 2.59 in small, medium and large size groups ranging no specific trends. The productivity and net income in both villages has been formed quite good and satisfactory. Farmers of the both villages if they are alert then the cost of production have been reduced and net income was increased. They

have to maintain weed management along with a good farm plans. The study finally concludes that for getting better yield and better net income they have to go in future with good farm plans and better crop management systems.

References

- Ghosh, S.K., N. Laskar and S.K. Senapati (2003). Estimation of loss in yield of brinjal due to pest complex under Terai region of *West Bengal Environ Encol.*, **21**: 764-9.
- Kuppuswamy, S. and M. Balasubramanian (1980). Efficiency of Synthetic Pyrethroids against brinjal fruit borer, *Leucinodesorbonalis* Guan. *S Indian Horti.*, **28**: 91-3.
- Purohit, M.L. and A.K. Khatri (1973). Note on the Chemical Control of *L. Orbonalis* (Guen) (Lepidoptera : Pyraustidae) on brinjal, *Indian Journal of Agriculture Science*, **43**: 214-5.